E-LEARNING AND INSTRUCTIONAL PROCESS IN TERTIARY EDUCATION INSTITUTIONS (TEI) IN NIGERIA

Eunice C. Victor-Ishikaku (Ph.D)[1]; Grace O. Opuru[2]
[1]Department of Curriculum Studies and Instructional Technology
Ignatius Ajuru University of Education
Rumuolumeni, Port Harcourt
Rivers State
Nigeria

[2]Department of Curriculum Studies and Instructional Technology
University of Port Harcourt
Choba, Rivers State
Nigeria

ABSTRACT

Information and Communication Technology (ICT) has defined its own way of doing things, it has also provided the knowledge and skills required for such activities. This has brought a transformation in every human activity including the education system. E-learning is now the modern and better way of carrying out instructional process. The tertiary education institution which is vested with the responsibility of producing the manpower needed to run the society ought to follow the trend to catch up with the technology-fused, knowledge-based global society. E-learning is about using technology for instructional purposes whether totally or in part, to complement the conventional methods. E-learning has the potentials to take care of the population explosion in the Nigerian tertiary education institution; being able to carry diverse learners along, overcome the challenges of incessant strike actions by allowing the learners the opportunity to carry on with their studies at their own pace and convenience using personal technology devices. In that way, it takes care of individual learners needs, irrespective of their locations. Though there are challenges in the use of e-learning in the tertiary education institution, as it is still in the teething stage in Nigeria, they can be overcome if the political will is there to make the right policies and plans to implement them. The paper therefore suggests that government, at all levels should play their role consciously, NGO and multinationals should collaborate with the government to make the e-learning policies and plans to work by providing and maintaining them, training and retraining of staff should be given due attention for them to be abreast with the best practices in e-learning strategies, there should be willingness and conscious efforts by tertiary education institutions education givers to use e-learning strategies in the instructional process amongst others.

Keywords: : E-learning, Instruction, Tertiary Education challenges institutions, instructional process, prospects

1. INTRODUCTION

Education is adjudged the potent tool for effecting change in the society. It plays significant role in societal development and so it is no gainsaying the fact that education is the mechanism for growth and development in every human endeavor. To Lingamurthy and Srihylam (2016), the strength of any nation depends on the strength of her education system which in turn depends on the effectiveness of the instructional process. The instructional process is the heartbeat of the education system. It is the crucible where the competent manpower to drive the growth and development in the society are made; especially the higher education sector which is vested with the responsibility of producing relevant manpower for the nation. The important of this is that the instructional process in tertiary education institutions must get it right, and that implies the use of ICT strategies.

In the present times, technology plays prominent role in the instructional process, hence the need to apply ICT devices and strategies to train manpower that will be abreast with the technology-fused, knowledge-based principles of the present day society. The emergence of ICT into the society and the education sector in particular has brought about new and better ways of instruction (Bennett, 2019, Lawless, 2018). One of such strategies for instruction is e-learning. E-learning is a form of instructional process where technology is the mainstay of the teaching-learning process, used either wholly or in part for instruction. Tertiary education is the last segment of the education system in Nigeria; the institutions in this segment are vested with the responsibilities of producing relevant manpower that will man the different job/positions that will lead to the growth and development of the society. This is done through teaching (instruction), research and community service (Usoro, 2016). It is therefore very necessary for the Tertiary Education Institutions (TEI) to use current strategies of instruction that is in line with the present day demands of the labour market. This will enable them produce the caliber of manpower that will compete favourably in the present knowledge-based, technology driven global economy. For this reason, this paper advocates for the effective application of e-learning strategies as it has great potentials for preparing and equipping present day graduates for the present day labour market both locally and at the international scene.

Tertiary Education in Nigeria

Education system in Nigeria is segmented into three (3); primary education, secondary education and tertiary education (higher education). Tertiary education is the last stage of the formal education system. In the NPE, tertiary education is seen as the education given after the secondary education (FGN, 2014). Tertiary education institutions (TEI) in Nigeria are the universities, college of education, polytechnics, monotechnics and other allied institution such as school of nursing, college of health sciences and research institute amongst others. The role of tertiary education institution is teaching, research and community service. These activities are geared towards the development of manpower in terms of knowledge and skill acquisition and to disseminate same for the growth and development of the society (Usoro, 2016). It is saddled with the responsibility of training skilled manpower for job and professional occupations.

In addition to manpower creation, tertiary education institution are tools for social mobility to enhance individual's knowledge and skill for better economic value and status, and also for political and social development of the nation. This is so, because the product of tertiary education determine the level of the development of a nation, since they produce the needed manpower for the nation's growth and development (Olutola & Olatoye, 2015).

In line with these statements the goals of tertiary education as stated in the NPE (FGN, 2014) are to:
- contribute to national growth and development through high level relevant manpower training.
- develop and inculcate proper values for the survival of the individual and the society.
- develop the intellectual abilities of individuals so as to understand and appreciate their local and external environment.
- acquire both physical and intellectual skills which will enable individual to be self-reliant and useful member of the society.
- promote and encourage scholarship, entrepreneurship and community service.
- forge and cement national unity and
- promote national and international understanding and interaction (FGN, 2014, pp. 39).

A critical look at these goals of tertiary education show that its modus operandi should be teaching (instruction), research and community service; all geared towards development of skilled manpower for occupation and profession, enhancing the national economy, promote values and ideals necessary for survival, and promote national unity, all in a bid to placing the nation in a position to favourably compete effectively in the global knowledge economy of this dispensation. The impact of this is that tertiary education institution in

Nigeria should integrate and apply all relevant means including technology to enhance education that will place in a position of advantage to survive and benefit in the competitive global economy. It is on this note that this paper advocates on the need to consider e-learning as a strategy for effective instructional delivery for better results.

Usoro (2016) stated that the current teaching-learning processes in higher education institution engage learners in learning experiences and strategies that do not encourage reflective thinking, creativity and innovation. The author emphasized the need for the use of strategies that are abreast with the current trends in the society due to shift in lesson delivered and not just being aware of the shift. A shift to a new paradigm for teaching-learning in higher education institution that is backed up by action; from lectures as experience today to learning and the learner in active interaction with the learning content (Uduk, 2016).

Instructional Process

Instruction is the art of direction or information to someone to enable the individual perform a task effectively. In the classroom processes, instruction could be used interchangeable with teaching. Instruction (teaching) is planned activity involving putting together a set of events that a learner needs to learn and impacting it in such a way that it creates a positive impact in the life of the learner (Victor-Ishikaku, 2015). It is a human endeavor whose sole aim is to help individual to learn. It involve sets of activities put together deliberately to help the learner to acquire knowledge and skill. Instruction process involves planning, implementation and evaluation to find out the effectiveness of what has been implemented.

Instructional strategy is one of the most vital issues in the teaching-learning process. It is the bridge that connects the teacher and the learner. This is so, because a well-planned and organized learning content cannot just translate into positive impact or change in behavior of the learner except it is properly delivered via the instructional process (Ochoma & Victor-Ishikaku, 2016). A beautifully designed learning content cannot metamorphose into knowledge and skills in the learner without adequate instructional process. This is where e-learning comes in. In the past, convectional instructional strategies have been in use. Studies has shown that emergent technology make greater positive impact on the learner (Obilor, Iheonunekwu & Ugbuta, 2012 and Olorunyomi, 2018), hence the need to effectively utilize them for instruction purposes in higher education institution.

National Policy on E-learning

ICT today is playing key role in enhancing education. As such, government of the world are fully involved in the funding and developing infrastructures and regulating ICT policies. Studies has shown that in every nation ICT is fundamentally driving the education sector (Edemoh & Ogedebe, 2014). Based on this premise Nigeria as a nation developed her IT policies to tap the potentials of the new ICT to enhance the development of her education system. The national policy on IT mission statement is to help enhance pedagogical innovations using e-learning to prepare for global competitiveness and to integrate IT into education and training (Edemoh & Ogedebe, 2014). The establishment of the national policy on IT in 2001 (FRN, 2014) brought about:

- the revision of the NPE to emphasize the incorporation of ICT at all educational levels.
- the ministerial initiative on education which provided the blueprint for e- education in Nigeria (Olorunyomi, 2018).

In tertiary education, the ICT policy began when the NPE in 2004 stated that ICTs will be emphasized at all levels of the Nigeria education system. It stated that;

- all states, teachers resource centres, universities, institutes of education and other professional bodies will belong to the network of ICT.
- Government will provide the facilities and infrastructures needed to promote ICT at all levels of education.

All the ministerial initiative on education contained some policy statements on ICT on e-education blueprint, its strategies and action plan (Obilor, Iheonunekwu & Ubguta, 2012). These policies, though skeletal, to address the issues of e-learning in tertiary education institution, is an indication that the place of e-learning and ICT in tertiary education institution cannot be taken for granted. These policy steps gave rise to the establishment of some agencies and commissions such as;

- Nigeria Information Technology Development Agency (NITDA)
- National Communication Commission (NCC)
- Digital Bridge Institute
- Intel Teach Programme
- Nigeria Uni Network (NUNET)
- Polytechnic Network (PolyBNet)

Though the lecturers and learners have positive attitude on e-education (Obilor, Iheonunekwu & Ubguta, 2012), there is still a way wide margin between the awareness of its use and the actual utilization in reality for teaching-learning process.

E-Learning

E-learning is learning using electronic technologies outside the convectional teaching methods; (www.elearningnc.gov, 2020), relying completely online. It is a learning mode where the learner interacts with the teacher and other learners. From the definitions, it shows that e-learning may not require physical contact with the teacher but interaction still goes on between the teacher and the learners. The computer, tablet, cellphones and the internet system are the major component of e-learning (Lawless, 2018). E-learning mode learning is accessible to a large number of learners even though some argue that it lacked human element needed in learning. E-learning or electronic learning to Lawless (2018) is the delivery of learning using digital resources. It is online delivery of information and integrating ICT. E-learning to Okah (2010) in Edemoh & Ogedebe, (2014) is any form of learning delivered using electronics. Activities that could be used as live or pre-recorded learning content, video, quizzes, simulations, games and activities can be done through synchronous and asynchronous means (https://www.td.org, 2019). E-learning is about using ICT to enhance or support learning (www.oecd.org>edu>ceri, 2018).

E-learning though defined from different perspectives based on the background of the author has a common denomination, bringing the different definitions to a point; as any form of instructional process involving the use of electronic media either wholly or partly for instructional delivery; convey learning content, administer and monitor learning. It could be carried out through the different modes of education which are the formal, informal or non-formal, with the internet as the connecting factor between the teacher and the learner. It applies both totally online instruction delivery or technology mediated learning modes. It could also be used to supplement the convectional teaching methods as in blended learning or completely online.

E-learning as a concept cannot be said to be entirely new in Nigeria though with the emergence of ICT, e-learning process has entirely been transformed into higher and new level; taking over the convectional correspondence programme (Nwabufo, Umoru & Olukotun, 2012). This has allowed more flexibility in access to knowledge and its delivery. E-learning in the education sector has brought a lot of innovations in the system such as improved access to equality education, pedagogical strategies in the teaching-learning process, distance learning, access to and sharing of information, revenue generation and school management (Edemoh & Ogedebe, 2014). It is web-based and online technology used for the purpose of education. E-learning is one of the most significant educational innovations powered by the ubiquitous technology which has given learners vast alternatives access and opportunities for quality education (Eze, Chinedu-Eze & Bello, 2018). Factors that facilitates the use of e-learning are;

- The internet
- Emergence of multimedia
- Accessibility of digital devices
- Well organized learning management systems (LMS)

Prospects of E-Learning for Tertiary Education

The prospects of e-learning for tertiary education is enormous if effectively applied. Such benefits outlined by several authors are;

1. E-learning has the potentials to take care of the population explosion in our universities and the challenges of facilities to accommodate the learners.
2. It can also take care of the problem of incessant strike actions by universities workers as no years will be lost, as learners can still be learning on their own via asynchronously modes.
3. It is cost effective, both for the learner and the education providers as the government.
4. It enables the learner to keep job as well learn at the same time to enhance economic capability and productivity.
5. Provides opportunity for enhanced human capacity building.
6. It is flexible for any learner and convenient because it is self-paced, learning around one's daily activities; whenever, wherever, whatever and however.
7. It may not require high technology electronic devices, personal handheld devices can serve the purpose of learning.
8. Easy and rich for information sharing and so offers just-in-time knowledge and skills.
9. Offers improved access to quality learning experiences as it provides opportunity for variety of learning content (multimedia such as videos, text and audio amongst others)
10. It eliminates the risk of travelling to and fro to a very great extent, reaching learners at different locations with quality education.
11. It has great potential for adaptability as it could be used by any level of levels in respect of the challenge or handicap.

It takes place both synchronous and asynchronous and so is versatile for accommodating different learners in terms of lifestyle, activities, job and lots more (Lawless, 2018; Olorunyomi, 2018 and Edemoh & Ogedebe, 2014; https://www.td.org, 2019).

Challenges of E-learning in Tertiary Education Institution (TEI)

Despite the enormous benefits of e-learning to enhance quality education delivery in tertiary institutions. E-learning modes is still a mirage due to some obvious factors. Though the federal government has acknowledged the role of ICT for quality education, hence it statement in the NPE, words have not been matched with actions, hence the teething stage we are still struggling with. Some of this surmountable challenges are;

1. Poor policy formulation and implementation: Policies are the framework on which institutions operate. There is need to properly articulate and formulate ICT policies in Nigeria.
2. Poor staff development policies and implementation.
3. Lack of e-learning facilities such as electricity, internet connection, poor access network connections, computers and laptops. There cannot be e-learning without those.
4. Fear of technology by lecturers and learners.
5. Inadequate manpower: There is dearth lack of ICT trained manpower as lecturers and supporting staff to manage the e-learning facilities. The ones available should be sent for in-service training to be abreast.
6. Lack of e-learning expertise in handling e-learning strategies by teachers in the tertiary education.
7. Lack of funds is a serious hinge in e-learning for managing teaching-learning process. Funding generally

is a major challenge in the Nigeria education system. The government is the major sponsor of schools and so should look into this. There should be adequate education finance policies.

8. There is the problem of poor maintenance culture of the available ICT facilities (Salawudeen, 2020 in Nwabuffo, Umoru & Olukotun, 2012; Obilor, Iheonunekwu & Ubgutsa, 2012; Victor-Ishikaku, 2017).

Conclusion

To meet the present day demands of workplace requirements, tertiary education institution must consider the application of e-learning in its instructional processes. Inspite of its challenges which are surmountable, e-learning has great prospects, if applied by the tertiary education institution, to produce the needed manpower to place the nation in a position to compete favourable in the global technology-fused, knowledge-based economy. It will create accessibility, adaptability, flexibility to learning, accommodating all manner of learners in terms of population, timing, job, location and lifestyle. This will help to harness individual potentials which will result to the growth and development of the society.

Suggestions

Based on the discourse, the following suggestions are made;

1. The government and the relevant education stakeholders should review the ICT policies to meet the current trend in ICT development especially as it relates to the tertiary education in Nigeria.

2. Government at all levels to be involved in the provision of ICT facilities in the tertiary institutions, community based ICT centre should be provided in strategic location that will be accessible to online learners.

3. NGO and multinationals should be involved to partner in the provision of the ICT facilities infrastructure as part of their corporate responsibilities.

4. Government should create enabling environment and encourage the production of low-cost laptops, handheld devices that will be adaptable to the Nigeria environment and make them available to lecturers and learners.

5. Proper implementation and monitoring strategies to be made by the government to effectively monitor and supervise the provision, use and implementation of the ICT policies and facilities.

6. There should be regular training and retraining of university lecturers and support staff in e-learning strategies and its application in the instructional process.

References

1. Bennett, C. (2019). Definition of E-learning. Retrieved from https://m.economictimes.com>e-lea... On 02/02/2019.
2. Edemoh J. O. O. & Ogedebe P. M. (2014). Prospects & Challenges of E-learning Nigerian Universities. Retrieved from https://www.researchgate.net on 12/03/2019.
3. Eze, S. C., Chinedu-Eze, V. C. & Bello A. O. (2018). The utilization of e-learning facilities in the educational delivery system of Nigeria: a study of M- University. *International Journal of Educational Technology in Higher Education* 15(1) 34 from https://scholar.google.com on 10/02/2019.
4. Federal Government of Nigeria (2014). National Policy on Education. Abuja. NERDC.
5. https://www.td.org. What is E-learning? Retrieved on 04/02/2019.
6. Lawless, C. (2018). What is e-learning. Retrieved from https://www.learupon.com on 10/02/2019.
7. Lingamurthy, T. & Srihylam P. (2016). Attitudes to E-education among teacher educators. *International Journal of Innovative Research in Advanced Engineering (*IJIRAE) 12(3) www.ijirae.com on 17/02/2019.
8. Nwabufo, B. N., Umoru, T. A. & Olukotun J. O. (2012). The challenges of e- learning in

Tertiary Institution in Nigeria. https://conference.pixel- online>net>... On 12/03/2019.

9. Obilor, F. N., Iheonunekwu, S. & Ubguta, J. K. (2012). Integrating information and communication technology into Nigeria school systems. JEMT. 16(1) 13-18.

10. Olorunyomi, C. R. (2018). Emphasizing the use of ICT into primary education system in Nigeria for Sustainable Development. JEMT 23(1) 240-251.

11. Olutola, A. T. & Olatoye, O. O. (2015). Challenges of E-learning Technologies in Nigerian Universities Education. Retrieved from https://www.researchgate.net on 12/03/2019.

12. Uduk, I. E. (2016). An educational exorcism to exchume higher education in Nigeria. *Journal of Pristine* 12(1) 13-22.

13. Usoro, E. B. (2016). Towards transformation of higher education in Nigeria: A practical reality. *Journal of Pristine* 12(1) 1-12.

14. Victor-Ishikaku, E. C. & Nyenwe, J. (2013). One-on-one technology: Implication for functional education in Nigeria. JEMT (17(2) 118-123.

15. Victor-Ishikaku, E. C. (2015). Teaching Skills Handbook for Trainee Teachers.

16. Port Harcourt. Calebest Publishers.

17. Victor-Ishikaku, E. C. (2017). Utilization of ICT amongst Academic Staff in teaching-learning process in Ignatius Ajuru University of Education, Port Harcourt, Rivers State. *Multidisciplinary Journal of Research Development* (MULTORED) 27(2) 349-354.

18. www.elearningnc.gov>what-is-ele...(2019). What is e-learning? Retrieved on 02/02/2019